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(74) Agent: SANTANGELO, Luke; Santangelo Law Offices, P.C., Third floor, 125 South Howes, Fort Collins, CO 80521 (US).

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(71) Applicant (for all designated States except US): DAKO-CYTOMATION DENMARK A/S [DK/DK]; Produktionsvej 42, DK-2600 Glostrup (DK).

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(72) Inventors; and

(75) Inventors/Applicants (for US only): KEY, Marc [US/US]; 290 Saddle Lane, Ojai, CA 93023 (US). FEIN-GOLD, G [US/US]; 5242, Austin Road, Santa Barbara, CA 93111 (US). WELCHER, Rosanne [US/US]; 1175 Church Street, Ventura, CA 93001 (US).

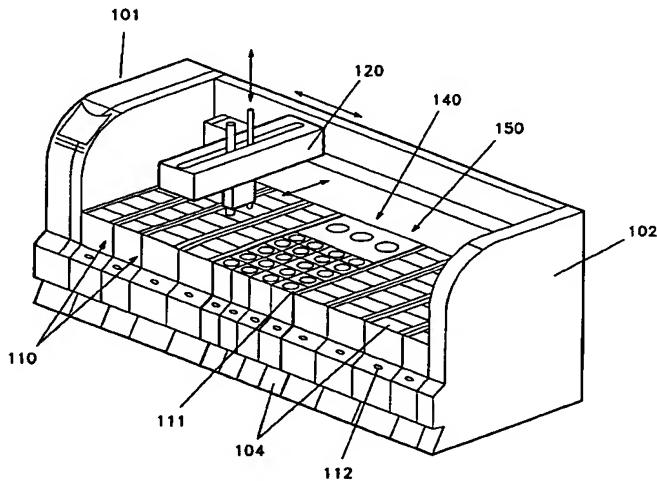
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(54) Title: ENHANCED SCHEDULING SAMPLE PROCESSING SYSTEM AND METHODS OF BIOLOGICAL SLIDE PROCESSING



(57) **Abstract:** A sample processing system (101) that may be automated and methods are disclosed where sample(s) (198) are arranged on a carrier element (197) and a process operation control system (171) automatically processes the sample(s) perhaps robotically according to a desired aggregation of event dictated by an input (173). Alteration of an initial aggregated event topology may be accepted while the system is processing an initial aggregation and varied-parameter robotic control simulation functionalities (606) may be accomplished to determine an enhanced sequence for processing. Suggested operator actions may be displayed that might further enhance the scheduling of the altered aggregated event topology together with an automatic operator need prompt (608) that may inform an operator of a need for a particular action in order to accomplish the desired tasks. Reversibility to proposed changes may be made available so that an operator may avoid having to activate proposed changes if they cause a processing result that is not acceptable.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 21/00, 1/30, 33/48
 US CL : 422/67; 435/40.5, 286.1, 287.3, 288.7; 702/19

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | US 5,839,091 A (RHETT et al.) 17 November 1998, see abstract. | 1-158 |
| A | 6,352,861 A (COPELAND et al.) 05 March 2002, see "Summary of Invention" section. | 1-158 |

Further documents are listed in the continuation of Box C.

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Robert Warden

Telephone No. 571-272-1700